LISTING OF CLAIMS:

1. (Original) A semiconductor sensor comprising:

a substrate;

a membrane which is a thin part formed on a top surface of the substrate; and

a thick portion which is formed in a portion excluding the thin portion from the substrate; wherein

a hollow part is formed under the membrane by bonding a bottom of the substrate and a mounting surface on which the semiconductor sensor is mounted;

a pressure difference adjusting means is provided for eliminating difference in pressure of a fluid between an inside and an outside of the hollow part while the sensor is in use; and

the pressure difference adjusting means is at least a relief hole, provided on the membrane, for the expansion or contraction of a fluid within the hollow part, only the at least a relief hole communicating the hollow part to an outside of the semiconductor sensor.

2. (Original) A semiconductor sensor, as set forth in claim 1, wherein the membrane is provided with the at least a relief hole for the expansion or contraction.

3. (Original) A semiconductor sensor, as set forth in claim 1, wherein the at least a relief hole for the expansion or contraction is provided by etching the membrane.

4. (Original) A semiconductor sensor, as set forth in claim 1, wherein it is any one of an infrared-ray sensor, a gas sensor, an air fuel ratio sensor, a pressure sensor and an acceleration sensor.

5. (New) A semiconductor sensor, as set forth in claim 1, wherein the hollow part formed under the membrane is substantially enclosed by the mounting surface.

6. (New) A semiconductor sensor, as set forth in claim 1, wherein there is provided one relief hole.

7. (New) A semiconductor sensor, as set forth in claim 1, wherein there are provided four relief holes.

8. (New) A semiconductor sensor, as set forth in claim 7, the relief holes being provided at respective corners of the membrane.

9. (New) A semiconductor sensor, as set forth in claim 1, wherein the entire undersurface of the substrate is bonded to the mounting surface to enclose the hollow part.

10. (New) A semiconductor sensor comprising:

a substrate;

a membrane which is a thin part formed on a top surface of the substrate; and

a thick portion which is formed in a portion excluding the thin portion from the substrate; wherein

a hollow part is formed under the membrane by bonding a bottom of the substrate and a mounting surface on which the semiconductor sensor is mounted, the entire undersurface of the substrate being bonded to the mounting surface to enclose the hollow part;

at least a relief hole is provided on the membrane for eliminating difference in pressure of a fluid between an inside and an outside of the hollow part while the sensor is in use, the at least a relief hole being provided on the membrane, for the expansion or contraction of a fluid within the hollow part, only the at least a relief hole communicating the hollow part to an outside of the semiconductor sensor,

wherein the semiconductor sensor is any one of an infrared-ray sensor, a gas sensor, an air fuel ratio sensor, a pressure sensor and an acceleration sensor.

11. (New) A semiconductor sensor, as set forth in claim 1, wherein there is provided one relief hole.

12. (New) A semiconductor sensor, as set forth in claim 1, wherein there are provided four relief holes.

13. (New) A semiconductor sensor, as set forth in claim 12, the relief holes being provided at respective corners of the membrane.